

LRN, ERN:, & BERN @ WIRELESS INTEGRATING THE SCIENCES (WITS) THEATRE

L. Hilliard¹, B. Campbell¹, M. Foody², D. Klitsner³

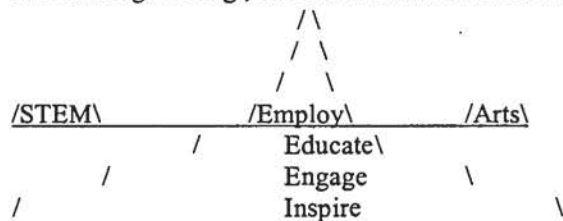
¹NASA Goddard Space Flight Center, Greenbelt, MD 20771 301-286-9294 Lawrence.M.Hilliard@nasa.gov
²Global Imagination, 700 Gale Dr., Ste. 260, Campbell, CA 95008 408-866-6800 Mike@GlobalImagination.com
³KID-Group LLC, 58 2nd St., San Francisco, CA 94105 (415) 905-8375 ext 15 dan@kid-group.com

1. INTRODUCTION

In order to develop a call to action for a learning tool that would work to best teach Science Technology Engineering and Math (STEM), the NASA Goddard team will partner with the inventor of Bop It!, an interactive game of verbs and following instructions; and Global Imagination, the developers of Magic Planet.

In this paper Decision-making Orbital Health! (DOH!) will be described as a game derived from the basic functions necessary for BopIt!, a familiar game. that will ask the educational audience to respond to changing commands to Bop It!, Twist It!, and Squeeze It! The success of the new version of the game, will be that the Earth will be making these commands from Dynamic Planet, and the crowd assembled can play wirelessly.

Wireless Integrating The Sciences (WITS) Theatre : A balanced approach will describe how the communities local to Goddard and perhaps San Francisco will develop curriculum that helps kids teach kids with an engaging game and a STEM message. The performing arts will be employed to make it entertaining and appropriate to the size of the gathering , and the students educational level .



2. LRN @ WITS THEATRE

Wireless Integrated Command and calibration sensors and software for WICCKi-spheres (the remote modems) can occupy the hands of kids learning about Lunar Science on Lunar Recon Night (LRN), Earth Science on Earth Recon Night: w/ a local message, and blaze the trail for Beyond Earth Recon Night (BERN).

DOH! Is the verb-based game that has different stages for different levels of the E/PO pyramid , and self-calibrating sensor pontoons and skis for the Oceans and Cryospheric Branches at Goddard. These variable bandwidth gaming systems will introduce the next generation to decision-making technology.

This decision-making commands and responses is analogous to many Integrated System Health Management (ISHM) systems. A Youth-based test crew can learn about spacecraft dynamics, and teach others to

Think Globally - LRN Locally

- o Teen Educational Network- Early Twenties too!(TEN-ETt!) "youth players"
- o "Magic Planet" and Global Imagination components (i.e. DOH! Command Center)

The Dynamic Planet contains some of the greatest and cutting-edge Earth Science NASA has been responsible for over the last decade and longer. Dynamic Planet serves as a major conduit for students, formal educators, informal educators, science-attentive public, and the general public interested in learning about our planet and what is the current state of its overall health. By using this spherical method or projection, those viewing it will better understand topics such as ocean color, polar sciences, hydrology, atmospheric, and much more. The WITS program will take this concept to the next step by allowing all communities to wirelessly integrate what they are learning with the science being demonstrated.

Two programs that this may serve well would be the Coastal Observation Project based and the NASA Wallops Flight Facility and the Landsat Image Mosaic of Antarctica (LIMA) Education Program at the NASA Goddard Space Flight Center. The first program called the Coastal Observation Program teams up scientists working in coastal ocean research with students and teachers from NASA Explorer Schools and beyond. Students and teachers participate in ocean research cruises to measure everything from ocean color to phytoplankton concentration to sea surface salinity. Using WITS to better understand the dynamic of ocean color through wirelessly interactive Dynamic Planet capabilities would enhance the learning of the students once they return to their classrooms. They could view the satellite data from missions such as SeaWiFS and Aqua through such a venue.

The latter program, the Landsat Image Mosaic of Antarctica (LIMA) allows people to "visit" a high definition version of Antarctica from the comfort of their homes, classrooms or offices. Created by USGS using NASA Landsat data, LIMA is the most cutting edge way to view the features of Antarctica. We are currently working on getting LIMA imagery on the Dynamic Planet. The LIMA Education Program strives to allow students to learn more about global climate change through the physical happenings on Antarctica. By using WITS and LIMA imagery, students will be able to understand the processes that form the Antarctic landscape and those that are threatening it.

11. REFERENCES

Additional input from the businesses of Primary Simulation, Inc., Global Imagination and Kid-Group LLC [1].

[1] <http://www.globalimagination.com/products.html>

[2] <http://www.kid-group.com/>

[3] <http://www.psism.com/psi.htm>